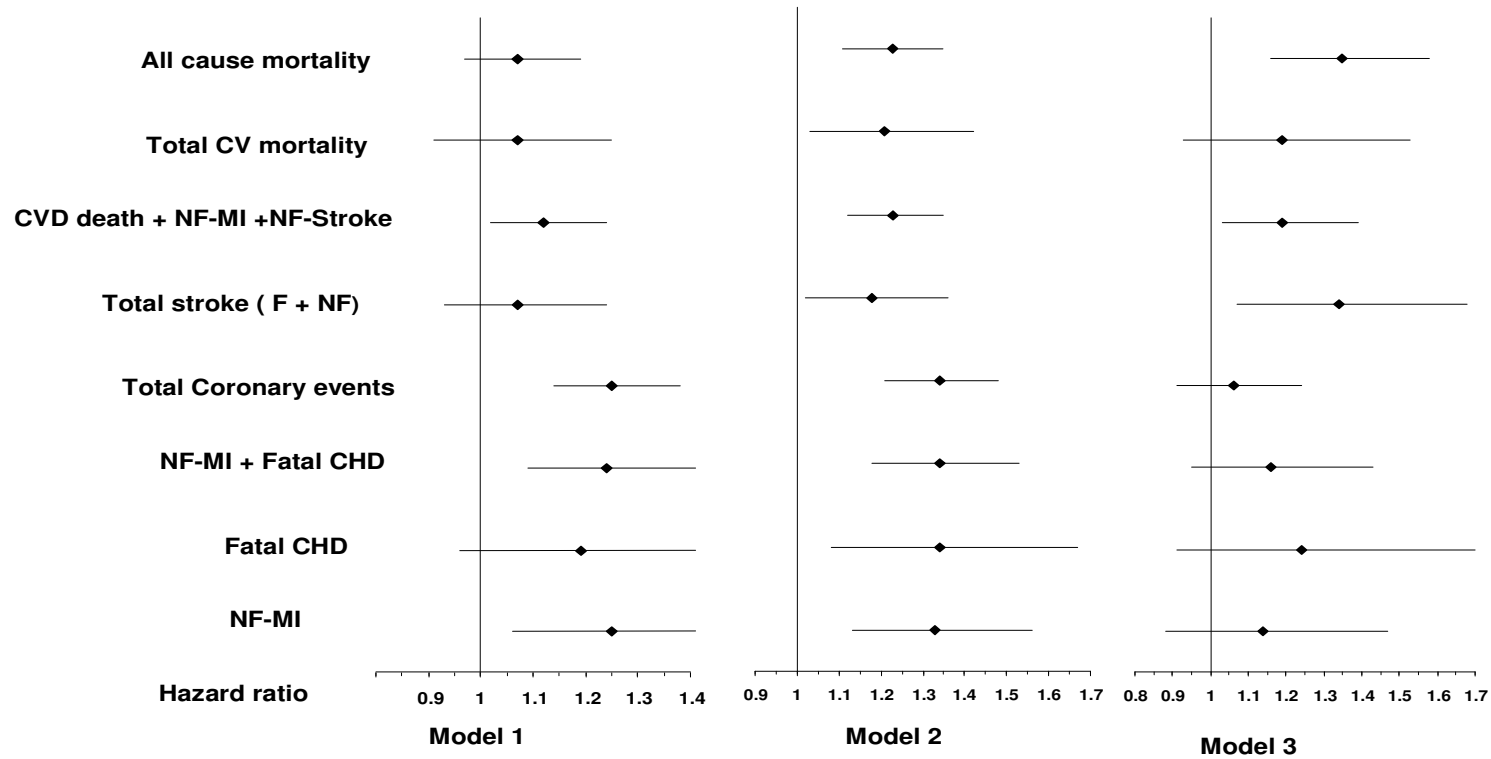


Online-only-appendix figures and tables:

Online-only appendix Figure1: Risk of coronary, stroke, and death outcomes associated with the metabolic syndrome (defined using ATP 6.1 definition)



Model 1 = Univariate MS ; Model 2= Model 1 plus age, sex & ethnicity ; Model 3= Model 2 plus Fasting plasma glucose, triglyceride, HDLc, SBP & BMI . NF= Non-fatal ; F= Fatal ; CHD= Coronary heart disease

Appendix Table 1: Hazard ratio (95%CI) associated with metabolic syndrome (defined using ATP 6.1 definition) for coronary, stroke and death outcomes

Number of patients (n=19257)	Primary outcome (Fatal CHD plus NF MI)	Total coronary events	Total stroke (Fatal and NF)	Cardiovascular mortality	All cause mortality
<i>Number of events</i>	<i>N=903</i>	<i>N=1605</i>	<i>N=749</i>	<i>N=605</i>	<i>n=1558</i>
Model	Hazard ratio (95%CI)	Hazard ratio (95%CI)	Hazard ratio (95%CI)	Hazard ratio (95%CI)	Hazard ratio (95%CI)
Model 1	1.24(1.09-1.41)	1.25(1.14-1.38)	1.07(0.93-1.24)	1.07(0.91-1.25)	1.07(0.97-1.19)
Model 2	1.34(1.18-1.53)	1.34(1.21-1.48)	1.18(1.02-1.36)	1.21(1.03-1.42)	1.23(1.11-1.35)
Model-3*	1.16(0.95-1.43)	1.06(0.91-1.24)	1.34(1.07-1.68)	1.19 (0.93-1.53)	1.35(1.16-1.58)

* In model-3, 1827 patients with non-fasting values of glucose and/or triglyceride were excluded from the Cox model, leaving a total of 17430 patients for analyses. Among these patients, there were 808 primary outcomes, 1439 total coronary events, 661 total strokes, 538 cardiovascular mortality and 1407 all-cause mortality outcomes observed during the follow-up.

Appendix Table 2a: Hazard ratio (95%CI) associated with ATP 5.6 definition of metabolic syndrome for coronary, stroke and death outcomes

	Primary outcome (Fatal CHD plus NF MI)	Total coronary events	Total stroke (Fatal and NF)	Cardiovascular mortality	All cause mortality
<i>Number of events</i>	<i>N=903</i>	<i>N=1605</i>	<i>N=749</i>	<i>N=605</i>	<i>n=1558</i>
Model	Hazard ratio (95%CI)	Hazard ratio (95%CI)	Hazard ratio (95%CI)	Hazard ratio (95%CI)	Hazard ratio (95%CI)
Model 1	1.21(1.06-1.37)	1.24(1.12-1.36)	1.06(0.92-1.23)	1.03(0.88-1.21)	1.04(0.94-1.14)
Model 2	1.30(1.14-1.48)	1.31(1.19-1.45)	1.17(1.01-1.35)	1.17(0.99-1.37)	1.18(1.07-1.30)
Model-3*	1.10(0.90-1.35)	1.05(0.90-1.23)	1.37(1.10-1.71)	1.13(0.89-1.45)	1.26(1.08-1.46)

* In model-3, 1827 patients with non-fasting values of glucose and/or triglyceride were excluded from the Cox model, leaving a total of 17430 patients for analyses. Among these patients, there were 808 primary outcomes, 1439 total coronary events, 661 total strokes, 538 cardiovascular mortality and 1407 all-cause mortality outcomes observed during the follow-up.

Appendix Table 2b: Hazard ratio (95%CI) associated with ASCOT 6.1 definition of metabolic syndrome for coronary, stroke and death outcomes

	Primary outcome (Fatal CHD plus NF MI)	Total coronary events	Total stroke (Fatal and NF)	Cardiovascular mortality	All cause mortality
<i>Number of events</i>	<i>N=903</i>	<i>N=1605</i>	<i>N=749</i>	<i>N=605</i>	<i>n=1558</i>
Model	Hazard ratio (95%CI)	Hazard ratio (95%CI)	Hazard ratio (95%CI)	Hazard ratio (95%CI)	Hazard ratio (95%CI)
Model 1	1.17(1.02-1.33)	1.20(1.09-1.32)	1.02(0.88-1.18)	1.02(0.86-1.19)	1.02(0.93-1.13)
Model 2	1.26(1.11-1.44)	1.28(1.16-1.41)	1.12(0.97-1.30)	1.17(0.99-1.38)	1.20(1.08-1.33)
Model-3*	1.07 (0.87-1.31)	0.99 (0.85-1.16)	1.26(1.02-1.56)	1.25(0.97-1.62)	1.17 (1.00-1.38)

* In model-3, 1827 patients with non-fasting values of glucose and/or triglyceride were excluded from the Cox model leaving total of 17430 patients for analyses. Among these patients, there were 808 primary outcomes, 1439 total coronary events, 661 total strokes, 538 cardiovascular mortality and 1407 all-cause mortality outcomes observed during the follow-up.

Appendix Table2c: Hazard ratio (95%CI) associated with ASCOT 5.6 definition of metabolic syndrome for coronary, stroke and death outcomes

	Primary outcome (Fatal CHD plus NF MI)	Total coronary events	Total stroke (Fatal and NF)	Cardiovascular mortality	All cause mortality
<i>Number of events</i>	<i>N=903</i>	<i>N=1605</i>	<i>N=749</i>	<i>N=605</i>	<i>n=1558</i>
Model	Hazard ratio (95%CI)	Hazard ratio (95%CI)	Hazard ratio (95%CI)	Hazard ratio (95%CI)	Hazard ratio (95%CI)
Model 1	1.13(0.99-1.29)	1.18(1.07-1.30)	1.02(0.88-1.17)	1.00(0.85-1.17)	1.00(0.91-1.10)
Model 2	1.21(1.06-1.38)	1.25(1.14-1.38)	1.12(0.97-1.29)	1.13(0.96-1.32)	1.14(1.03-1.26)
Model-3*	1.00(0.82-1.23)	0.99(0.85-1.15)	1.38(1.10-1.72)	1.10(0.86-1.41)	1.25(1.07-1.45)

* In model-3, 1827 patients with non-fasting values of glucose and/or triglyceride were excluded from the Cox model, leaving a total of 17430 patients for analyses. Among these patients, there were 808 primary outcomes, 1439 total coronary events, 661 total strokes, 538 cardiovascular mortality and 1407 all-cause mortality outcomes observed during the follow-up.

Appendix Table 2d: Hazard ratio (95%CI) associated with IDF definition of metabolic syndrome for coronary, stroke and death outcomes

	Primary outcome (Fatal CHD plus NF MI)	Total coronary events	Total stroke (Fatal and NF)	Cardiovascular mortality	All cause mortality
<i>Number of events</i>	<i>N=903</i>	<i>N=1605</i>	<i>N=749</i>	<i>N=605</i>	<i>n=1558</i>
Model	Hazard ratio (95%CI)	Hazard ratio (95%CI)	Hazard ratio (95%CI)	Hazard ratio (95%CI)	Hazard ratio (95%CI)
Model 1	1.03(0.89-1.18)	1.07(0.96-1.19)	0.96(0.82-1.12)	1.02(0.86-1.22)	0.99(0.88-1.10)
Model 2	1.14(0.99-1.32)	1.18(1.05-1.31)	1.10(0.93-1.29)	1.23(1.03-1.47)	1.19(1.06-1.33)
Model-3	1.16(0.92-1.46)	1.03(0.87-1.22)	1.50(1.16-1.93)	1.35(1.03-1.78)	1.40(1.18-1.66)

* In model-3, 1827 patients with non-fasting values of glucose and/or triglyceride were excluded from the Cox model, leaving a total of 17430 patients for analyses. Among these patients, there were 808 primary outcomes, 1439 total coronary events, 661 total strokes, 538 cardiovascular mortality and 1407 all-cause mortality outcomes observed during the follow-up.

Appendix table 3: Event rates for pre-specified coronary, stroke and death outcomes associated with those with and without presence of metabolic syndrome at baseline

Outcomes* observed	Total patients randomised (n=19257)		Without metabolic syndrome [#] at baseline(n=10823) absent		With metabolic syndrome [#] at baseline (n=8434)	
	No of events	Rate**(95 %CI) (per 1000 pyrs)	No of events	Rate**(95 %CI) (per 1000 pyrs)	No of events	Rate**(95 %CI) (per 1000 pyrs)
(Fatal/NF) MI plus (Fatal/NF) stroke	1494	14.6(13.8-15.3)	797	13.8(12.8-14.8)	697	15.6(14.5-16.8)
Cardiovascular mortality	605	5.7(5.3-6.2)	331	5.5(5.0-6.2)	274	5.9(5.2-6.7)
Total stroke (Fatal/NF)	749	7.2(6.7-7.7)	409	7.0(6.3-7.7)	340	7.5(6.7-8.3)
Primary outcome: Fatal CHD and MI (NF)	903	8.6(8.1-9.2)	461	7.8(7.1-8.6)	442	9.7(8.8-10.7)
Primary outcome plus revasc procedure [§]	1284	12.4(11.8-13.1)	663	11.4(10.5-12.3)	621	13.8(12.7-14.9)
Total coronary endpoints [¶]	1605	15.7(14.9-16.5)	817	14.1(13.2-15.1)	788	17.7(16.5-19.0)
Total coronary endpoints + revasc	1666	16.3(15.5-17.1)	852	14.8(13.8-15.8)	814	18.3(17.1-19.6)
NF MI (both silent and symptomatic)	596	5.7(5.3-6.2)	303	5.1(4.6-5.8)	293	6.4(5.7-7.2)
Fatal CHD	329	3.1(2.8-3.5)	171	2.9(2.5-3.3)	158	3.4(2.9-4.0)
NF stroke	652	6.3(5.8-6.8)	355	6.0(5.4-6.7)	297	6.5(5.8-7.3)
Cardiovascular death +MI +stroke [§]	1733	16.9(16.1-17.7)	927	16.0(15.0-17.1)	806	18.0(16.8-19.3)
All cause mortality	1558	14.7(14.0-15.4)	851	14.2(13.3-15.2)	707	15.2(14.2-16.4)

- * All pre-specified or post-hoc coronary, stroke and death outcomes. NB. Time to first event is considered for each of the outcome separately.
 - # Defined on basis of original NCEP-ATP definition (ATP 6.1)
 - ** Event rates are per 1000 person years
 - § Post-hoc published end points.
 - ¶ It includes outcomes such as angina, unstable angina and fatal and non-fatal heart failure in addition to those specified in primary outcome.
- NF: Non-fatal; MI: Myocardial infarction, revasc: revascularisation procedure, CI: confidence interval, pyrs: person years